

pennekamp ▶



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Porojet Burner

## Porojet Burner

Our latest development and commercialized Side Burner (POROJET) has been designed to fulfil the customers' demands for having more efficient and ecological combustion. This type of burner system is 100% compatible with the former type of Side Burners on all conventional lehrs, no matter whether they have been made by Pennekamp or any other manufacturer. Moreover, by replacing Pennekamp's side burners with POROJECT (Plug-in), no further adjustment is required to the Lehr including its PLC.

The POROJET Burner is a premix burner and its combustion is executed independently from lehr inner pressure. This guarantees perfect combustion with reduced CO and NOx emission.

POROJET burners are operated with adjustable power (4-stage burner), whereby the capacity can be adapted to the actual requirements. Such adjustment is being monitored by pressure and temperature sensors. The 4th Stage (Active cooling mode) is Pennekamp unique feature.



### 1<sup>st</sup> Stage (40-160 kW)

Power output 40 kW (Default mode)

### 2<sup>nd</sup> Stage (40-160 kW)

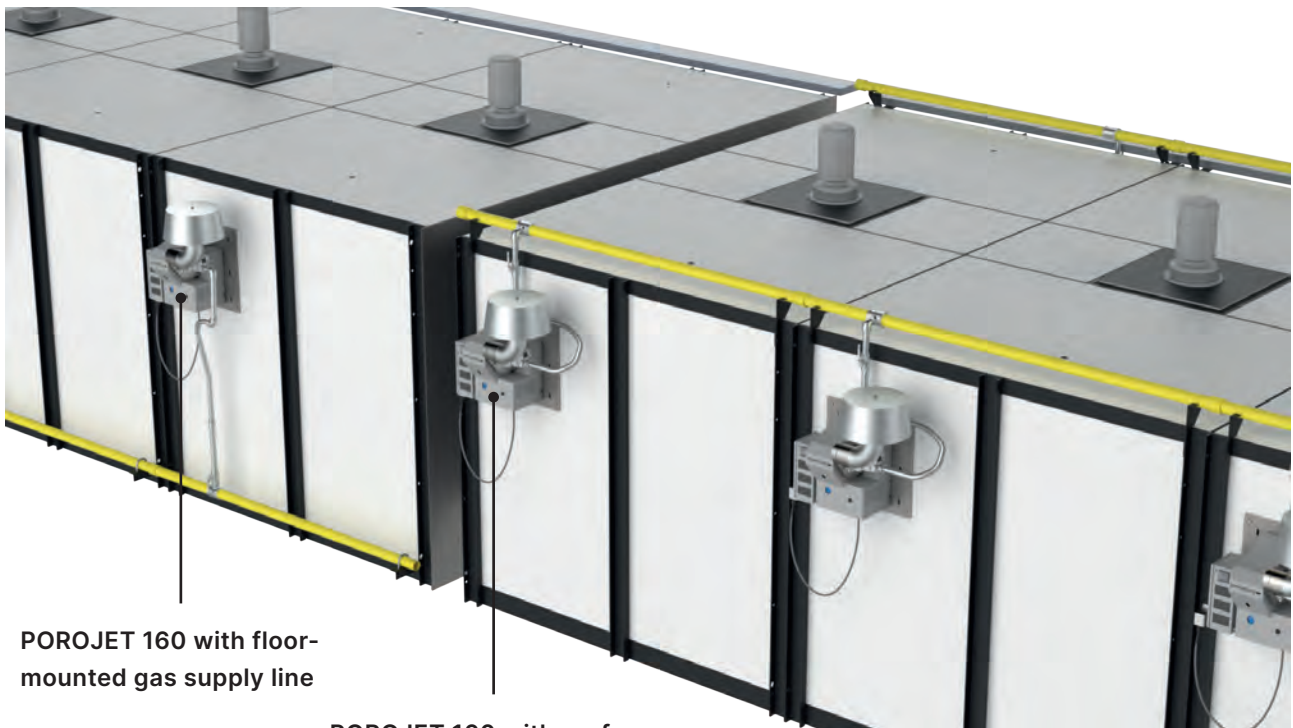
Power output 160 kW (Default mode)

### 3<sup>rd</sup> Stage

Stand-by mode (0kW)

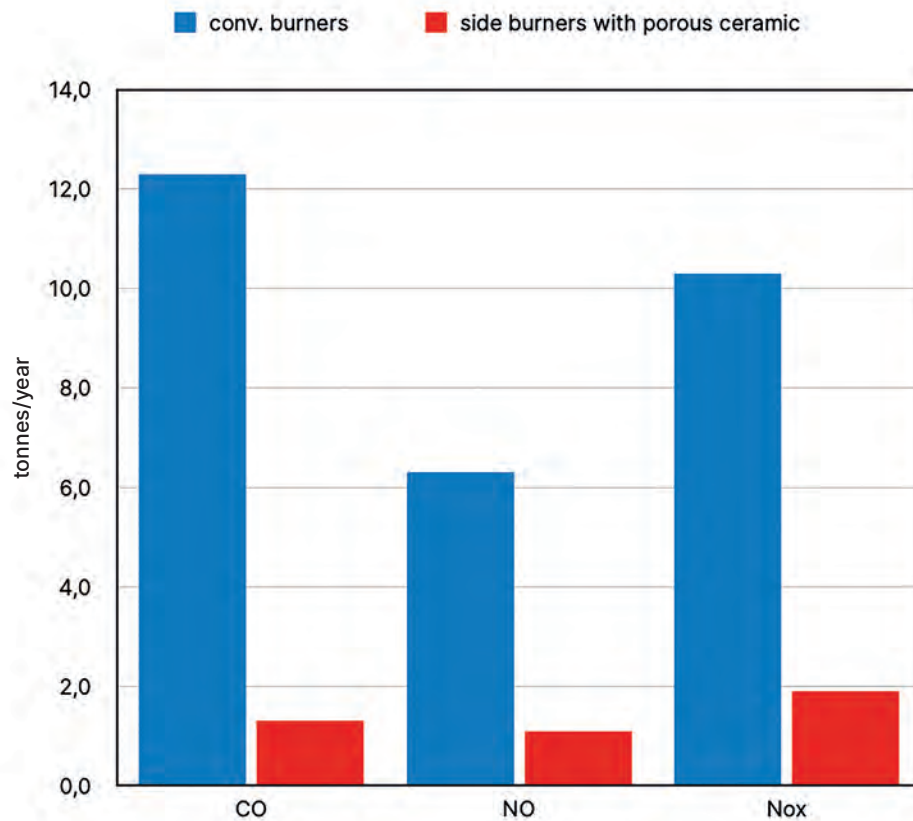
### 4<sup>th</sup> Stage

Active cooling mode (Reducing zone Temp.)



POROJET 160 with floor-mounted gas supply line

POROJET 160 with roof-mounted gas supply line



The POROJET Burner is equipped with a porous ceramic (heat-resistant) burner head. The system is virtually maintenance free. Only service/checks and cleaning/replacement of the air filter shall be executed.

By using the POROJET Burner, an energy saving of up to 25% is achievable, compared with the classical gas burners in the market.

An additional feature of this burner is the possibility of minimizing its ignition process in comparison with the regular (ON/OFF) side burners.

#### Technical advantages and features at a glance

- Reduction of NOx, CO and NO (80%)
- Extremely short flame length
- Perfect combustion efficiency
- Fully complied with EN 746-2
- High volume integrated air filter
- All-gas premix burner (NG/LPG)
- Energy-efficient (25%) less consumption
- H2-ready (Hydrogen fuel gas)

## Features

- 4-stage power control burner
- 2 stages with adjustable power output in the range of 40kW to 160kW
- Standby mode with 0kW
- Burner head from porous ceramic
- Pre-assembled for quick installation
- High volume integrated air filter
- Fully complied with EN 746-2

### Advantages:

- Supplementary use for existing Pennekamp lehrs with low mechanical and electrical modification
- Nitrogen oxide reduction up to 80%
- Reduced energy consumption up to 25%
- Extremely short flame length
- H<sub>2</sub>-ready (Hydrogen fuel gas)

## Porojet Burner

### Mechanical Characteristics

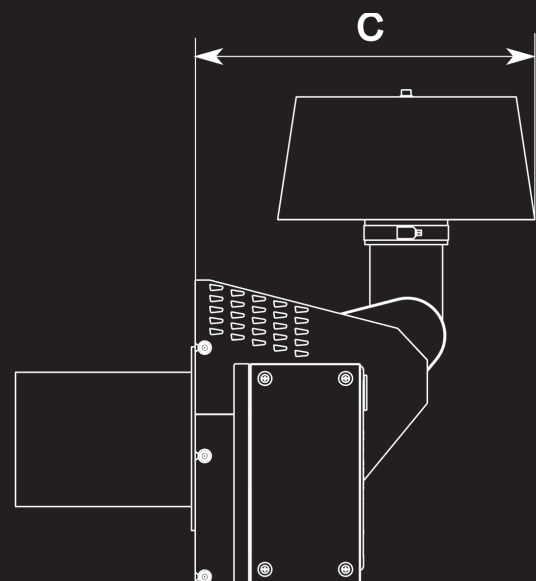
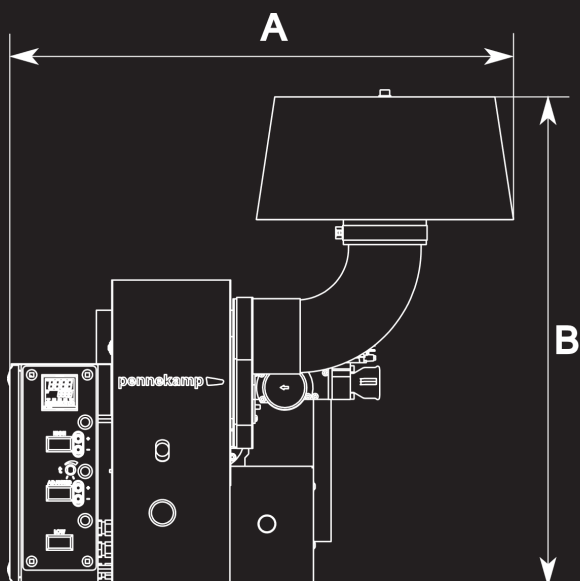
Width	A = 690mm
Height	B = 660mm
Depth	C = 465mm
Weight	30kg

### Electrical Characteristics

Phases	1
Voltage	230V
Frequency	50Hz

### Gas Supply

Gas Types	NG/ LPG
Pressure	50 – 250mbar



**pennekamp** 



Ernst Pennekamp GmbH & Co. OHG

Königsfelderstraße 38-42  
D-58256 Ennepetal

T +49 (0) 23 33 605 – 0  
info@pennekamp.de  
[www.pennekamp.de](http://www.pennekamp.de)